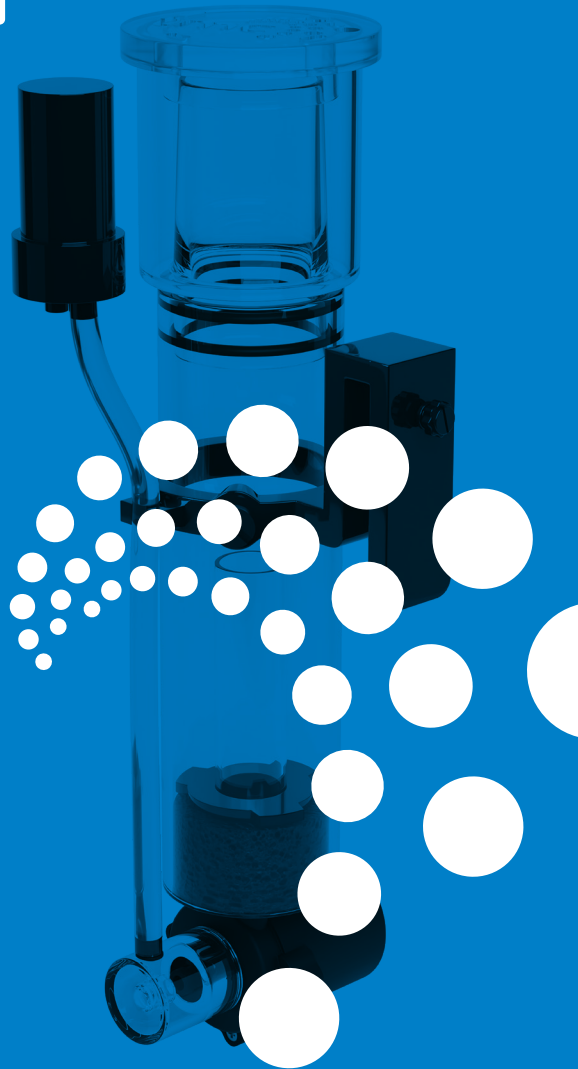
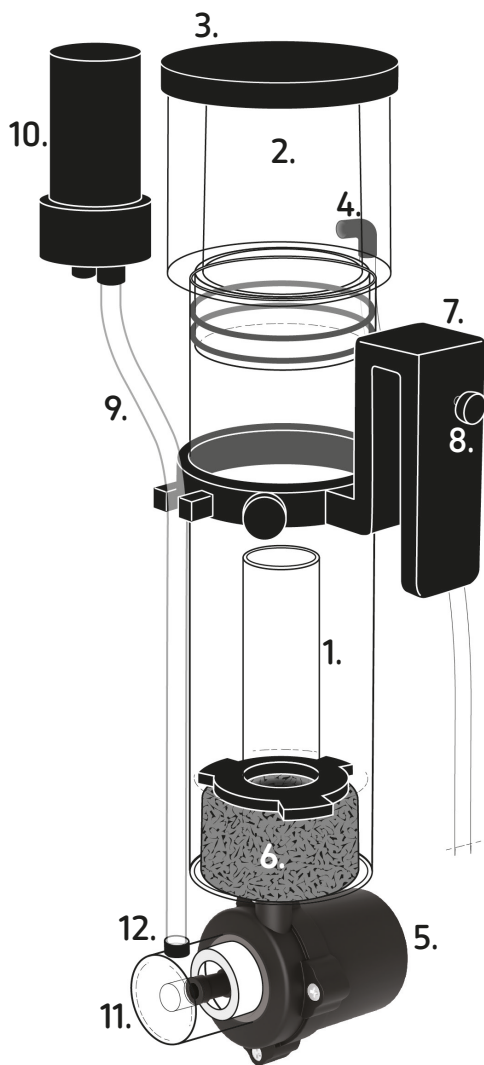




# Reef Skim 100nano

INSTRUCTIONS  
ENGLISH ONLY





## SPECIFICATION

Code	1433
Model	Reef Skim 100nano
Suitable for	Aquarium up to 100l
Power.	5W
Pump Voltage	5V DC (USB)
PSU Voltage	100-240V 50/60Hz
Dimensions	120 x 85 x 300mm Approx.

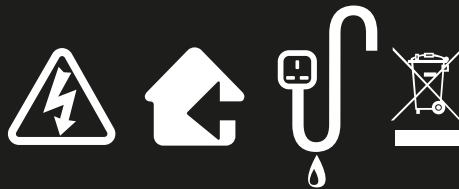
## PART LIST

1. Main skimmer body
2. Collection cup
3. Collection cup lid
4. Cup drainer
5. Pump
6. Sponge
7. Hanging bracket
8. Security screw
9. Air line
10. Air silencer
11. Venturi
12. Venturi air nipple

## INSTRUCTIONS FOR INSTALLATION AND USE

### Important Safety Information - Please Read Carefully

- Always isolate from the mains electricity before installing or carrying out any maintenance to the Reef Skim unit.
- Power to the Reef Skim unit must be supplied through a Residual Current Device (RCD) with a rated residual operating current not exceeding 30mA.
- Pump rating; AC: 100-240V, 50/60Hz unless marked otherwise. DC: See separate DC Pump instructions.
- Do not operate any appliance if it has a damaged cord or plug, if it is malfunctioning, or if it has been dropped or damaged in any way.
- This unit is designed to be used indoors and is not suitable for any outdoor applications.
- Ensure the Reef Skim unit is safely positioned before operating.
- Always leave a drip-loop in the cables to prevent water running down the cable and reaching the power source (see below).

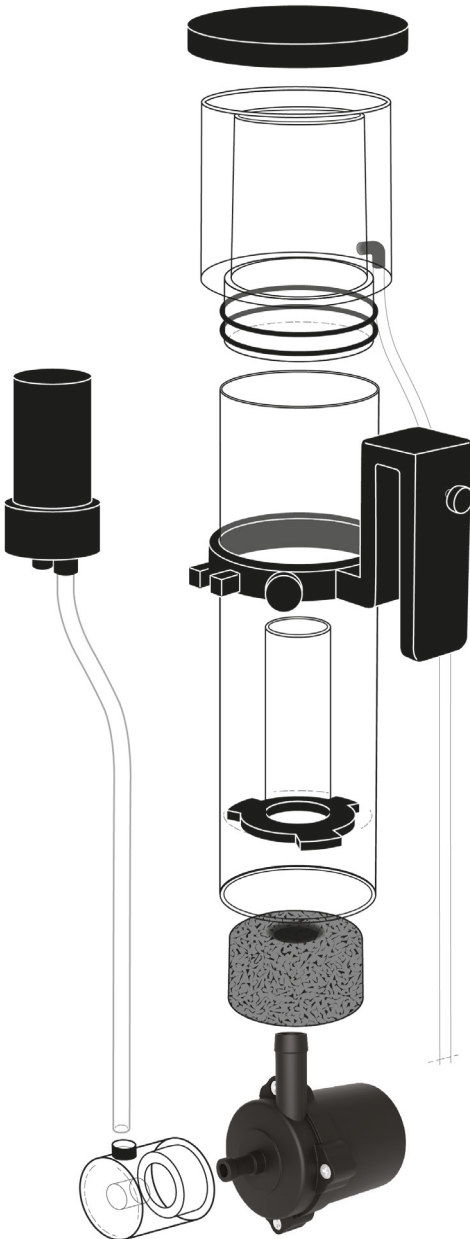


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Dispose of this unit responsibly. Check with your local authority for disposal information.

## FULL SKIMMER ASSEMBLY/RE-ASSEMBLY

These skimmers come almost fully assembled. For initial setup follow diagram below. If you are re-assembling after carrying out maintenance/cleaning please follow diagram below to re-assemble correctly.



Please note:

- These models are hang-on skimmers and are for use inside the aquarium or sump.
- The sponge helps stop bubbles returning to the aquarium and should be used as required to help stop bubbles exiting the skimmer.
- To adjust the water level inside the collection cup, gently twist the collection cup whilst slowly pulling it upwards or pushing it downwards.
- To attain a wet or dry skim, follow the instructions in "First and initial operation" on the following pages, adjusting the water level with the collection cup.
- For further fine tuning of water flow and to achieve optimum skimming performance the water flow of the pump can also be adjusted.
- Empty and clean collection cup and neck frequently and regularly clean or replace the sponge to ensure optimum performance. Failure to do so will result in operating problems and/or leaks.

### INSTALLATION

The Reef Skim 100nano unit is designed to be used inside the aquarium or sump only. To ensure that the collection cup can be easily removed for cleaning, allow at least 50mm clearance above the collection cup lid.

Ensure the skimmer and its parts are not touching the sides of the aquarium or sump as this may cause vibration noise.

### GENERAL OPERATING INSTRUCTIONS

Make sure all connections are tightly secured.

Ensure the collection cup is securely and correctly positioned on the main skimmer body and that the drain plug is in place or the collection cup drain hose is attached.

Clean and empty the collection cup regularly, and periodically clean and maintain all other internal parts to ensure the skimmer works as efficiently as possible.

## INITIAL OPERATION

1. Once correctly assembled and positioned, plug in and switch on the pump.
2. Allow the pump to run for 24-48 hours to allow the skimmer to establish itself before adjusting it to a wetter or dry skim.
3. It may take up to 5 weeks for the skimmer to become stable and for the number of bubbles passed back into the tank to reduce. Please note: these bubbles are completely safe.
4. We recommend you check the water level frequently and use the collection cup drain hose provided to avoid over-skimming accidents.
5. The biological output of your aquarium will vary daily and even hourly depending on stocking, water change regime, feeding and additives used. This could result in changes in the amount of skimmate produced and therefore adjustments are required whenever there is a major change in any of the above.
6. Once the skimmer is established and the water level is stable within the collection cup, control the water level within the main chamber of the skimmer body to your desired foam consistency.

## DRY SKIMMING

1. To adjust the water level inside the collection cup, gently twist the collection cup whilst slowly pulling it upwards or pushing it downwards until the micro-bubbles fill approx. 10-15% of the collection cup cone (see diagram).
2. The micro-bubbles produce a dense foam layer which rises to the top of the cone where it collects until the dry foam overflows into the collection cup.
3. The result is a dry foam, consisting of concentrated waste material, which may condense into a dark liquid.
4. For further fine tuning of water flow and to achieve optimum skimming performance the water flow of the pump can also be adjusted.

## WET SKIMMING

1. To adjust the water level inside the collection cup, gently twist the collection cup whilst slowly pulling it upwards or pushing it downwards until the micro-bubbles fill approx 50% of the collection cup cone.
2. Wet foam is produced and rises to the lid then slides down the collection cup cone as wet waste water. Use of the collection cup drain hose is recommended.
3. The result is a wet foam consisting of diluted waste material. This may condense into a yellow/light brown liquid. Use caution when wet skimming with an auto-top up system as your aquarium salinity may drop due to over compensation.
4. For further fine tuning of water flow and to achieve optimum skimming performance the water flow of the pump can also be adjusted.

NOTE: Variables such as introducing new fish or invertebrates into the aquarium, frequent feeding, adding supplements or medications, fluctuations in water quality, water changes and maintenance may temporarily alter the performance of the Reef Skim nano skimmers and/or removal of your additive.



## MAINTENANCE



**Caution:** To avoid possible electric shock, special care should be taken when using this electrical appliance near water.

**Caution:** Always isolate the pump from mains electricity before installing or carrying out any maintenance to the skimmer.

Reef Skim protein skimmers should need very little adjustment and maintenance once set up correctly. However due to salt deposits and the high calcium level in marine aquariums it is common for deposits to build up and therefore it is recommended that the skimmer and venturi are cleaned periodically with a bottle brush or similar. The air line may also need to be replaced periodically.

1. To operate efficiently, the skimmer must be in use 24 hours a day.
2. Make sure all connections are tightly secured.
3. Check regularly that the skimmer is functioning properly and producing the desired foam consistency and waste material.
4. When the collection cup is full or dirty, ensure all waste material is removed. The more frequently the cup is cleaned, the more efficient the skimmer will be.
5. Remove the collection cup by gently pulling the cup upwards, keeping it level. Clean any organic build up, salt and/or calcium deposits from the collection cup and neck.
6. Ensure the outlet, inlet and the air inlet on the venturi are clean and free of blockages.
7. Clean the pump regularly to ensure it does not become clogged with debris or detritus (refer to separate pump instructions for full maintenance details).
8. During cleaning and/or maintenance ensure that the collection cup O rings are clean and free from cracks and detritus, salt and/or calcium deposits. Make sure the O rings are correctly re-positioned after cleaning. Failure to do so could result in leaks when the water pump is switched on. Lubricate all O rings with silicon grease periodically.

## TROUBLE SHOOTING

### **Problem: The skimmer is not removing any waste**

1. Possible Cause: Water level is too low or skimmer is positioned in water that is too shallow.  
Solution: Alter water level accordingly or raise skimmer in the aquarium or sump.
2. Possible Cause: Air line, venturi or needlewheel impeller is blocked.  
Solution: Remove and check for blockage and clean as required.
3. Possible Cause: Pump is not plugged in or is not operating correctly.  
Solution: See pump section below
4. Possible Cause: The skimmer has not bedded in yet or the aquarium is too new to produce enough organic waste to be removed.  
Solution: Allow more time for the skimmer to bed in and the tank to mature.

### **Problem: Skimmer water level fluctuates**

1. Possible Cause: Evaporation causing level changes in the aquarium or sump.  
Solution: Install an auto top up system or similar, to ensure stable levels.
2. Possible Cause: Pump, venturi and needlewheel impeller may be blocked.  
Solution: Check that the pump, venturi and impeller are free from detritus.

**Problem: Pump is not operating correctly**

**Caution: Always isolate the pump from mains electricity before installing or carrying out any maintenance to the pump and refer to the pump operation, maintenance and safety instructions supplied with the pump.**

1. Possible Cause: Pump is not plugged in.

Solution: Ensure pump is connected to power supply and switched on.

2. Possible Cause: Pump is blocked with dirt and debris.

Solution: Clean the pump to remove dirt and debris (refer to pump instructions for full maintenance instructions).

**Problem: No air bubbles (or very few) are being produced inside the skimmer**

1. Possible Cause: The air line to the venturi is not attached.

Solution: Re-attach the air line to the venturi.

2. Possible Cause: The air inlet of the venturi or needlewheel impeller is blocked.

Solution: Remove and check for blockage and clean as required.

3. Possible Cause: Pump is not operating or performing correctly.

Solution: See pump section above.

**Problem: No foam is being produced inside the collection cup**

1. Possible Cause: Water level inside the chamber needs to be adjusted.

Solution: Alter water level accordingly.

2. Possible Cause: Skimmer has just been installed and may take up to 24hrs to adjust properly to the aquarium system.

Solution: Let the pump run for 24-48 hours to allow the skimmer to establish itself before making any adjustments.

**Problem: Water is rapidly overflowing into the collection cup**

1. Possible Cause: Water level may be too high or skimmer is positioned in water that is too deep.

Solution: Alter water level accordingly or reduce water level in the aquarium or sump.

2. Possible Cause: Water is not being discharged through the outlet.

Solution: Remove and check for blockage and clean water outlet as required.



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